



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 09/521,730  | 03/09/2000  | Kotikalapudi Sriram  | K Siriam 15-9              | 3757                   |
| 22046 7590 10/05/2007<br>DOCKET ADMINISTRATOR<br>LUCENT TECHNOLOGIES INC.<br>ROOM 2F-192<br>600-700 MOUNTAIN AVENUE<br>MURRAY HILL, NJ 07974-0636 |             |                      | EXAMINER<br>NGUYEN, TOAN D |                        |
|   |             |                      | ART UNIT<br>2616           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>10/05/2007    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/521,730             | KOTIKALAPUDI SRIRAM |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Toan D. Nguyen         | 2616                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-12, 15-18 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 and 28-31 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 4,939,772) in view of Key et al. (US 5,991,272) further in view of Miyagi et al. (US 5,894,471).

For claims 1-3, Goto discloses switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device, comprising the steps of:

receiving an incoming call, the incoming call representing one of a plurality of call types comprising voice calls and non-voice calls that can use a facility (col. 2 lines 1017);

Art Unit: 2616

admitting the incoming call for using the facility as a function of the call type of the incoming call (col. 10-17).

However, Goto do not expressly disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call; and

dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth.

In an analogous art, Key et al. disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls (figure 7, col. 8 lines 29-67); and

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call (col. 13 lines 28-29).

One skilled in the art would have recognized the determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls, and would have applied Key et al.'s network's operation in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Key et al.'s method and apparatus for controlling a communications network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to calculate effective bandwidths (col. 8 lines 34-35).

Furthermore, Goto in view of Key et al. do not expressly disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth. In an analogous art, Miyagi et al. disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth (col. 14 line 62 to col. 15 line 6).

One skilled in the art would have recognized the dynamically varying a block-have applied Miyagi et al.'s connection admission control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Miyagi et al.'s ATM network system and connection admission control method in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide the the SVC connection admission control function in the network equipment executes the connection admission control on the basis of the total bandwidth allocatable to SVCC and the VCI range (col. 14 lines 62-65).

For claim 4, Goto in view of Key et al. does not expressly disclose the step of blocking the incoming call if the incoming call is not admitted. In an analogous art, Miyagi et al. disclose the step of blocking the incoming call if the incoming call is not admitted (col. 13 lines 40-46).

One skilled in the art would have recognized the step of blocking the incoming call if the incoming call is not admitted, and would have applied Miyagi et al's connection admission control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Miyagi et al's ATM network system and connection admission control method in Goto's switching

Art Unit: 2616

control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide call blocking due to the lack of bandwidth (col. 13 lines 40-41).

For claim 9, Goto discloses switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device, comprising the steps of: determining the call type of an incoming call, each call type having an associated bandwidth (col. 2 lines 10-17);

admitting the incoming call to use the virtual circuit (col. 10-17).

However, Goto do not expressly disclose:

determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

admitting the incoming call as a function of the call type of the incoming call; • updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call; and

dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth.

In an analogous art, Key et al. disclose determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls;

admitting the incoming call as a function of the call type of the incoming call (figure 7, col. 8 lines 29-67); and

updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call (col. 13 lines 28-29).

One skilled in the art would have recognized the determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls, and would have applied Key et al.'s network's operation in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Key et al.'s method and apparatus for controlling a communications network in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to calculate effective bandwidths (col. 8 lines 34-35).

Furthermore, Goto in view of Key et al. does not expressly disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth. In an analogous art, Miyagi et al. disclose dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth (col. 14 line 62 to col. 15 line 6).

One skilled in the art would have recognized the dynamically varying a block-have applied Miyagi et al.'s connection admission control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Miyagi et al.'s ATM network system and connection admission control method in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide the the SVC connection admission control function in the network equipment executes the connection admission control on the basis of the total bandwidth allocatable to SVCC and the VCI range (col. 14 lines 62-65).

For claim 10, the claim is directed to the same subject matter in claim 4. . Therefore, it is subjected to the same rejection.

4. Claims 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 4,939,772) in view of Key et al. (US 5,991,272) and Miyagi et al. (US 5,894,471) further in view of Davis (US 6,157,654).

For claim 5, Goto in view of Key et al. and Miyagi et al. does not expressly disclose wherein step (b) further includes the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call. In an analogous art, Davis discloses the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call (col. 6 line 65 to col. 7 line 3).

Davis discloses further the step of increasing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call when the admitted incoming call departs (col. 7 lines 6-9 as set forth in claim 6).

One skilled in the art would have recognized the step of reducing the spare bandwidth by an amount equal to the call bandwidth of the admitted incoming call, and would have applied Davis's WFG Control in Goto's switching control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Davis adaptive service weight assignment for ATM scheduling in Goto's switching control apparatus for a communication terminal having a voice terminal device and a non-voice terminal device with the motivation being to provide WFQ Control to determine whether the demand can be met by the existing queue weights by comparing the request with the queue part allocated to the queue (col. 6 line 65 to col. 7 line 1).



For claim 11, the claim is directed to the same subject matter in claim 5.

Therefore, it is subjected to the same rejection.

For claim 12, the claim is directed to the same subject matter in claim 6.

Therefore, it is subjected to the same rejection.

***Allowable Subject Matter***

5. Claims 15-18, and 28-31 are allowed.

Regarding claim 15, the prior art fails to teach a combination of the steps of:  
responsive to the admitted call, providing a stream of ATM Adaptation Layer 2 (AAL2) packets for conveying information associated with the admitted call; and  
responsive to the stream of AAL2 packets, providing a respective stream of ATM cells for transmission over the virtual circuit, in the specific combination as recited in the claim.

Regarding claim 28, the prior art fails to teach a combination of the steps of:  
a processor responsive to the admitted call for providing a stream of ATM Adaptation Layer 2 (AAL2) packets for conveying information associated with the admitted call; and

a processor responsive to the stream of AAL2 packets for providing a respective stream of ATM cells for transmission over the virtual circuit, in the specific combination as recited in the claim.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-6, 9-12, 15-18, and 28-31 have been considered but are moot in view of the new ground(s) of rejection.


Art Unit: 2616

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-2723153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN  
TN



HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600